

# Report on Electroconvulsive Therapy For Fiscal Year 2019

As Required by
Health and Safety Code
Section 578.008(b)

Health and Human Services

Commission

April 2020

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### 1. Introduction

The Report on Electroconvulsive Therapy for Fiscal Year 2019 is required by Health and Safety Code, Chapter 578, Section 578.008(b), which states the Health and Human Services Commission (HHSC) must submit a report on electroconvulsive therapy (ECT) annually, to the Governor and presiding officer of each house of the Legislature.

The report must include a summary, by facility, of data received from ECT treatment providers under Health and Safety Code, Sections 578.006 and 578.007. Other required data include:

- Number of people who received ECT;
- Number of people voluntarily receiving mental health services who consented to ECT;
- Number of involuntary patients who consented to ECT;
- Number of involuntary patients for whom a guardian consented to ECT;
- Age, sex, and race of the people who received ECT;
- Source of payment for ECT therapy;
- Average number of non-ECT treatments;
- Average number of ECT treatments administered for each complete series of treatments, but not including maintenance treatments;
- Average number of maintenance ECT treatments administered per month;
- Number of fractures, reported memory losses, incidents of apnea, and cardiac arrests without death; and
- Autopsy findings if death followed within 14 days after the date of the administration of ECT.

As defined in the Texas Administrative Code (TAC), Title 25, Chapter 405, Section 405.103, ECT is a treatment in which a controlled, medically applied electrical current results in a therapeutic seizure, usually attenuated by anesthesia and muscle relaxants. ECT is a treatment option for some people with severe major depression, bipolar disorder, schizophrenia, catatonia,<sup>2</sup> and other mental health conditions. ECT is typically prescribed only after other treatments have not worked.

<sup>&</sup>lt;sup>1</sup> Section 578.007 also discusses other convulsive or coma-producing therapies, such as psychosurgery and pre-frontal sonic sound treatment.

<sup>&</sup>lt;sup>2</sup> A state of apparent unresponsiveness to external stimuli in a person who is apparently awake.

Acute treatment generally includes an initial series of 6–15 treatments, followed by less frequent maintenance treatments. The most common side effects of ECT are short-term and include headaches, muscle pain, nausea, and confusion or memory loss for a few minutes or hours after treatment. More serious, adverse side effects (e.g., long-term loss of memories) are less common. ECT can only be provided by a physician licensed to practice medicine in Texas using equipment registered with HHSC.<sup>3</sup> ECT may be administered only with proper consent<sup>4</sup> and may not be administered to individuals under age 16.

Facilities administering ECT must submit data to HHSC for this report and to assist with audits, analysis, and monitoring. This report is based on quarterly reports submitted by 22 facilities (Appendix A) in fiscal year 2019. The total number of patients who received ECT<sup>5</sup> across the four quarters are aggregated annually. Because patients may receive treatments in multiple quarters, the annual aggregate totals do not reflect the unique number of patients. Notable findings in fiscal year 2019 include:

- ECT providers submitted 2,994 ECT reports and administered 18,662 treatments to patients across all four quarters of fiscal year 2019. Patients may receive multiple treatments in the same quarter and may receive treatments in more than one quarter.
- Overall, physicians reported that patients had less severe symptoms after completing an ECT treatment series or after the last maintenance ECT than before they started the ECT treatment series or maintenance ECT.
- The majority of patients used a private third party for treatment payment.
- Providers reported no deaths, cardiac arrests without death, apneic events, or fractures within 14 days of ECT.

<sup>&</sup>lt;sup>3</sup> In accordance with Health and Safety Code, Chapter 578 and TAC Title 25, Chapter 405.

<sup>&</sup>lt;sup>4</sup> Treatments can be stopped at any time by the provider or the person who provided consent (patient or legal guardian).

<sup>&</sup>lt;sup>5</sup> Reports for Magnetic Seizure Therapy are included a) as the therapy involves an electrical current inducing a seizure and b) to protect patient confidentiality due to its comparatively infrequent use.

## 2. Demographic and Treatment Data

Figures 1-3 provide patient demographic data on gender, race/ethnicity, and age.

Figure 1. Gender/Sex of Patients

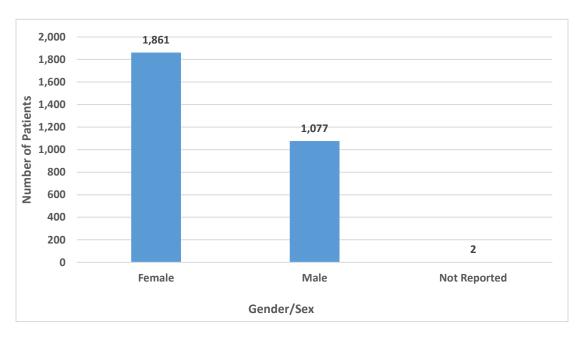


Figure 2. Race/Ethnicity of Patients

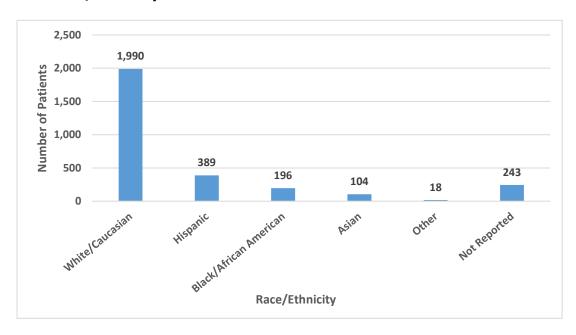


Figure 3. Age of Patients

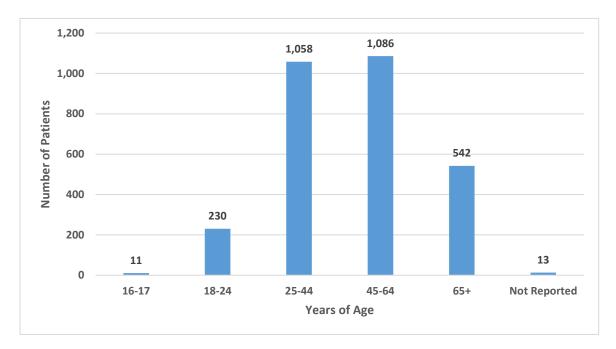


Table 1 shows the total number and average number of ECT treatments patients received. Where average totals are provided, the average total across all quarters was computed using non-rounded data from the ECT providers.

**Table 1. Total Number and Average Number of Treatments** 

Treatment Type	Total	Average Per Month <sup>6</sup>	Average Per Patient
Maintenance Treatments Administered	5,694	474.5	1.93
Acute Treatments Planned	18,491	N/A	6.29
Acute Treatments Administered	12,968	N/A	4.41
Complete Acute Treatments Administered (series)	4,221	N/A	1.44
Non-ECT Treatments <sup>7</sup>	0	N/A	0

<sup>&</sup>lt;sup>6</sup> Average monthly treatment data is only required for maintenance treatments.

<sup>&</sup>lt;sup>7</sup> Any other convulsive or coma-producing therapy used to treat mental health conditions.

Treatment Type	Total	Average Per Month <sup>6</sup>	Average Per Patient
Total Number of ECT Treatments Administered	18,662	N/A	6.35

Table 2 shows the number of patients that received ECT based on type of consent and admission.

Table 2. Number of Patients Based on Consent and Admission Type

Consent and Admission Type	Number of Patients
Voluntary patient consenting	2,854
Involuntary patient consenting	23
Guardian consenting for patient	37
Not Reported	26

Table 3 shows the primary source of payment used by patients who received ECT treatment.

**Table 3. Primary Source of Payment** 

Primary Source of Payment	Number of Patients
Private third party	1,645
Public third party (e.g., state or county resources)	1,177
Own/family funds	38
Other	41
Unfunded	1
Not Reported	38

### 3. Patient Outcomes Data

Facilities have up to four weeks after the patient's last treatment to complete a follow-up assessment. Some individuals completed treatment by the end of the quarter, but could not be reached by the facility for a follow-up assessment within the timeframe. These individuals are included in the "Undetermined" category. Some individuals whose treatments continued past the end of the quarter are included in the "Ongoing" category and may be counted in more than one quarter.

Figure 4 shows the physician-assessed severity of symptoms related to the condition being treated before and after ECT treatment. Patients reported experiencing less severe symptoms after ECT treatment.

1,700 1589 1,600 1,500 1,400 1,284 1,300 1,200 1,100 **Number of Patients** 1,000 900 800 720 700 550 600 481 500 385 366 400 300 221 149 200 102 100 17 16 **Before** 2-4 weeks after ■ Mild Moderate Severe Undetermined ■ Ongoing ■ Not Reported Extreme

Figure 4. Assessed Levels of Symptom Severity Before and After ECT Treatment

Figure 5 shows the physician-assessed level of memory loss before and after ECT treatment. Memory loss is a known risk and common side effect of ECT and must be discussed before obtaining consent in Texas.

Most types of memory loss experienced after ECT are not long-lasting and do not qualify as adverse events. Adverse memory loss effects are reported as very rare.

Figure 5. Levels of Memory Loss Before and After ECT Treatment

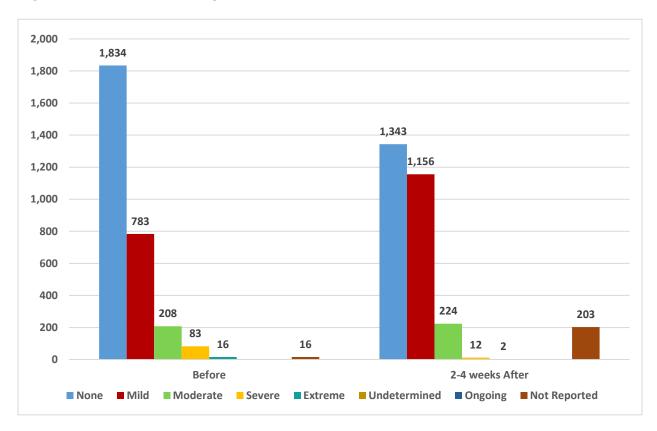


Table 4 shows the number of reportable adverse events after treatment.8

Table 4. Number of Reportable Adverse Events within 14 Days of ECT

Adverse Event	Total Number Within 14 Days of Treatment
Fractures	0
Apnea	0
Cardiac arrests without death	0
Death	0

<sup>8</sup> Section 578.007(b)(8) of the Health and Safety Code requires ECT providers to report autopsy findings if death followed within 14 days of administration of the therapy. However, the Texas Code of Criminal Procedure, Chapter 49, Article 49.05, provides that proper consent be obtained from the legal next of kin before an autopsy can be performed.

# Appendix A: Facilities Reporting ECT Data in Fiscal Year 2019

- Baptist Hospitals of Southeast Texas
- Baylor Scott & White Medical Center Temple
- Cypress Creek Hospital
- DePaul Center
- El Paso Behavioral Health System
- Harris Health System Ben Taub Hospital
- Houston Behavioral Healthcare Hospital
- Houston Methodist Hospital
- Laurel Ridge Treatment Center
- Mayhill Hospital
- Medical City Green Oaks Hospital
- Methodist Richardson Medical Center Campus for Continuing Care
- Methodist Specialty & Transplant Hospital
- Midland Memorial Hospital
- Seton Shoal Creek Hospital
- St Joseph Medical Center
- Terrell State Hospital
- The Menninger Clinic
- TMC Behavioral Health Center<sup>9</sup>
- UT Harris County Psychiatric Center (UT Health)
- West Oaks Hospital
- Zale Lipshy University Hospital

<sup>&</sup>lt;sup>9</sup> Facility reported through October 18, 2019.